## REMARKS

Request for Reconsideration

Applicants have carefully considered the matters raised by the Examiner in the outstanding Office Action but remain of the opinion that patentable subject matter is present. Applicants respectfully request reconsideration of the Examiner's position based on the amendments to the Specification, Claims and the following remarks.

Specification Amendments

In reviewing the Specification, a few typographical errors were noted on pages 42 and 43. They have been corrected herein.

Claim Status

Claims 1-8 had been examined in the Office Action and this amendment adds Claim 9 and amends Claims 2, 4, 5, and 8. Thus, pending in this Application are Claims 1-9.

Claims 2-5 have been withdrawn while Claims 1 and 6-9 are under examination.

Claims 2, 4 and 5 have been amended herein to change the phrase "steps for" to "steps of". The reason for this is to avoid any misunderstanding that these claims fall under the sixth paragraph of 35 USC 112.

Claim 8 has been amended herein to recite that the SF-1 value is 135 to 160. Support for this amendment can be found on page 12, lines 11-12.

Newly added Claim 9 finds support in the last paragraph on page 22 and the first two paragraphs on page 23.

Rejection of Claim 8 Under 35 USC 112, First Paragraph

Claim 8 has been rejected under 35 USC 112, first paragraph, in that the recited range for SF-2 was not supported in the Specification.

Claim 8 has been amended herein to recite an SF-1 value of 135 to 160 and the SF-2 value recited in Claim 8 has been deleted. As noted above, support for this amendment to Claim 8 can be found in the top paragraph on page 12. Respectfully, Claim 8 is now fully supported by the written description.

Rejection of Claims 1 and 6-8 based on Nozawa and Hashimoto

Claims 1 and 6-8 had been rejected as being anticipated by either Nozawa or Hashimoto. In both references, the Examiner had pointed to toners which had an SF-2 value that fell within the range recited in Claim 1 and a ratio of SF-1/SF-2 that also fell within the recited range of Claim 1. The Examiner then took the position that both these references inherently possess toner particles that have less than 5% by number in a size range of 0.6 to 1 μm. Applicants submit that this inherency position is flawed because there is ample evidence in the record, as well as on the face of the two cited references, to show that it is more likely that neither of the references have the claimed particle size limitation, namely, less than 5% of their particles being between .6 and 1 μm.

Data in the Application

Tables 2, 3 and 4 in the Application reports on various different colored particles some of which have SF-1 values and ratios of SF-1/SF-2 that fall within the claimed range but do not have the size limitation recited in Claim 1, namely, less than 5% being in the size range of .6 to 1

μm. In order to emphasize the data presented in the Application and to simplify the Examiner's review of that data, excerpts from Tables 2, 3 and 4 are presented below. It can be seen from these excerpts that, although toner particles can have SF-1 values and ratios of SF-1/SF-2 that fall within the claimed range, particles can have size distribution which falls outside the claimed range of not more than 5% being in the range of 0.6 to 1.0 μm. Specifically, the Examiner's attention should be directed to 1BK and 7BK vs. 5BK and 12BK. Particles 1BK and 7BK all had SF-1 values and ratios of SF-1/SF-2 as well as size range that fell within Claim 1. In contrast, 5BK and 12BK had SF-1 values and ratios of SF-1/SF-2 that were within the claimed range but a size range that fell outside the claimed range of not more than 5% having a size of 0.6 to 1 μm. Furthermore, it should be noted that the SF-1 values for each of the samples listed below, 1BK, 7BK, 5BK and 12BK are all fairly close and that the SF-1/SF-2 ratios are also fairly close. This should be contrasted with the fact that the percent of particles that are inside the claimed range vs. outside the claimed range is more substantial. The difference is the fact of 5, e.g. 1.0% to 5.7% or 5.2%.

TABLE 2 EXCERPTS

| Particle | SF-1 | SF-1/SF-2 | % in 0.6 - 1.0 μm |
|---|---|---|---|
| 1BK | 149 | 1.35 | 1.2 |
| 7BK | 146 | 1.26 | 1.0 |
| 5BK | 140 | 1.21 | 5.7 |
| 12BK | 147 | 1.31 | 5.2 |

TABLE 3 EXCERPTS

| Ex. | Particle | Image Density | Fog Density | Half-Tone Unevenness |
|---|---|---|---|---|
| | | Initial/After 50,000 | Initial/After 50,000 | Initial/After 50,000 |
| 1 | 1BK | 1.40/1.41 | 0.001/0.001 | A/A |
| 4 | 7BK | 1.40/1.41 | 0.001/0.002 | A/A |
| Comp 2 | 5BK | 1.40/1.42 | 0.001/0.012 | A/D |
| Comp 6 | 12BK | 1.40/1.44 | 0.001/0.015 | B/D |

TABLE 4 EXCERPTS

| | | | | |
|---|---|---|---|---|
| 7 | 1BK | 1.39/1.37 | 0.001/0.001 | A/A |
| 10 | 7BK | 1.40/1.39 | 0.001/0.001 | A/A |
| 8 | 5BK | 1.38/1.39 | 0.001/0.012 | A/D |
| 12 | 12BK | 1.39/1.43 | 0.001/0.018 | B/D |

This seemingly slight difference with respect to the amount of particles that fall within the claimed size range of .6 to .1 μm becomes fairly dramatic when comparing the results as reported in Tables 3 and 4, excerpts of which are presented above. For example, with respect to fog, 5BK shows a difference by a factor of 12 between initial fog density and fog density after 50,000 sheets. Toner particle 12BK shows a difference of fog anywhere from 15 to 18 times with respect to the initial fog density and the fog density measured after 50,000 sheets. This should be contrasted against the fog for 1BK and 7BK which show, at most, a factor of 2 between initial fog density and the fog density after 50,000 sheets.

The conclusion that should be drawn from this data is that not only does a toner which meets the SF-1 value and the ratio of SF-1/SF-2 value, not inherently possess the size limitation of not more than 5% having a size of .6 to 1 μm but, also, the fact that this difference dramatically affects quality of the photocopy which is made using the recited toner.

Respectfully, the data in the Application, which does warrant consideration, clearly demonstrates that it is not inherent, i.e. a characteristic that necessarily flows from the teachings, that a toner which has an SF-1 value and a ratio of SF-1/SF-2 that falls within the recited claim, have the particle size of not less than 5 having a size of 0.6 to 1 μm.

Mr. Yamazaki's Declaration of August 5, 2003

In an Office Action dated January 29, 2003 in this Application, a rejection was made based on references Ugai and Hashimoto. In that rejection, the Examiner had taken the position that both of these references inherently taught the 5% number limitation. In response to this rejection, tests were run to measure the material of Ugai and Hashimoto. Those tests were presented by way of a Declaration of Mr. Yamazaki dated August 5, 2003.

In Mr. Yamazaki's Declaration, it was shown that the SF-1 value and the ratio of SF-1/SF-2 for both Ugai and Hashimoto fell within the claimed ranges. It was also shown that the percent of particles that fell within the .6 to 1 μm was outside of the claimed range. This data was presented in Table 2 of Mr. Yamazaki's August Declaration.

The particles made in accordance to Ugai and Hashimoto were also tested for image density, fog density and half tone unevenness. That data was presented in Table 3 of Mr. Yamazaki's Declaration. As can be seen in Table 3 of Mr. Yamazaki's Declaration, the fog density for the Ugai material varied by a factor of 28 between the initial fog density and the fog density up to 50,000 sheets. With respect to Hashimoto, the fog density varied by a fact of 17 between the initial and the long term, after 50,000 sheets.

There are two conclusions that can be drawn from Mr. Yamazaki's Declaration with respect to the material of Ugai and Hashimoto. First, a toner that has an SF-1 value and an SF-1/SF-2 ratio that falls within the claims, does not necessarily have the particles which meet the limitation of not more than 5% having a size of 0.6 to 1 μm. The second conclusion that can be drawn is that a reference, which has an SF-1 value and an SF-1/SF-2 ratio that meets the limitations of Claim 1, will not result in toner particles which meet the number value of not more than 5% having a particle size of 0.6 to 1 μm.

It should also be noted that, in Mr. Yamazaki's August Declaration, the results of Tables 2 and 3 of the Application are attested to.

Thus, Applicants have submitted two sets of data to show that toner particles can have an SF-1 value and an SF-1/SF-2 ratio that falls within the claims but not have the size limitation of not more than 5% of the toner with a size of 0.6 to 1 μm.

Nozawa, on its face, doesn't measure below 2 μm.

In the Office Action, the Examiner took the position that, based on the small number of particles having a size of 4 μm or less, it appears that the reference would inherently have the 5% limitation. Applicants traverse this rejection because Nozawa specifically discloses that it doesn't measure below 2 μm.

At Column 20, lines 24 to 57 of Nozawa, he teaches measuring the particle size distribution. Specifically, at Column 20, lines 50 to 57, he states that the particle size distribution is measured for particles in the range of 2 μm or larger. Thus, Nozawa is not concerned with particles having a size distribution less than 2 μm. Since Nozawa

does not test for particles below 2 μm, it is submitted that the description of toner particles having 4 μm or smaller does not include particles with a particle size less than 2 μm.

Respectfully, based on the fact of the Applicants already showing that particles can have an SF-1 value and an SF-1/SF-2 ratio that falls within the claims but not having less than 5% of the particles with a 0.6 to 1 μm size range, it is submitted that Nozawa cannot inherently posses the 5% limitation since it does not even measure below 2 μm.

Hashimoto

The Examiner has pointed to Example 29 of Hashimoto to take the position that his particles inherently possess the 5% number limitation, however, as brought out above, just because the toner may have an SF-1 value and a ratio of SF-1/SF-2 ratio that falls within the claims, it is more likely that it won't necessarily have the 5% limitation.

Furthermore, it should be noted that the toner in Example 29 was prepared in the same manner as Example 25 except for replacement of the resin. In Example 25, pulverized crushed toner product was classified. There is, however, no mention in Example 25 of Hashimoto about the detailed conditions for classifying toner particles. Thus, one of skill in the art is not led to believe that the particles that are recited as having the average diameter of 10.5 μm will necessarily meet the claimed limitation of the 5% number values.

The Examiner has also pointed to Example 11 of Hashimoto as inherently having the 5% limitation.

In Example 17, it states that the toner particles are prepared in the same manner as Example 16 except that an unsaturated polyester is added. In Example 16, the toner particles are produced by a suspension method. Typically, in suspension polymerization, liquid drops and suspension are broken into smaller drops by applying a force to obtain particles with a desired diameter. When doing this, one generally arrives at a broad range of particle size distribution. Thus, there is no guarantee or, for that matter, it is unlikely that the particles will have the

necessary 5% limitation even if they have an SF-1 value and an SF-1/SF-2 ratio that falls within the claims.

Respectfully, it is submitted that it is highly unlikely Hashimoto has the necessary 5% limitation.

Conclusion

In view of the foregoing, it is respectfully submitted that Applicants have refuted the Examiner's position that Hashimoto and Nozawa inherently have the 5% limitation. Furthermore, it is respectfully submitted that it is clear that they do not. As the Examiner is aware, the Examiner has a burden to show that not that it may inherently possess the claim limitation but that it clearly has the claim limitation and that it is a characteristic that necessarily flows from the teachings of the prior art. It is submitted that Applicants have shown that the characteristic necessarily does not flow from the prior art.

In view of the foregoing, it is submitted that the Application is in condition for allowance and such action is respectfully requested. Should any extensions of time or fees be necessary in order to maintain this Application

in pending condition, appropriate requests are hereby made and authorization is given to debit account #02-2275.

Respectfully submitted,

MUSERLIAN, LUCAS AND MERCANTI, LLP

By: Donald C. Lucas

Donald C. Lucas
(Attorney for Applicants)
475 Park Avenue South
New York, New York 10016
Tel. # (212) 661-8000

DCL/mr

Encl: Return receipt post-card